

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-47. (Canceled)

48. (Previously Presented) A portal for interfacing a first data bus to a data interface, comprising:

uplink means configured and adapted for receiving data packets from said data bus, each of which data packets is associated with a respective one of a plurality of channels, determining, for each of said data packets, the channel with which it is respectively associated and transmitting only those of said received data packets onto said data interface that are associated with a channel that extends across said data interface.

49. (Previously Presented) The portal of claim 48, wherein said data packets are isochronous data packets.

50. (Previously Presented) The portal of claim 48, wherein said first data bus is an IEEE 1394 bus.

51. (Previously Presented) The portal of claim 48, wherein said first data bus and said data interface constitute part of a loop-free network.

52. (Previously Presented) The portal of claim 48, wherein said data interface is a bridge.

53. (Previously Presented) The portal of claim 48, wherein said data interface is a wireless bridge.

54. (Previously Presented) The portal of claim 48, wherein said data interface comprises a coaxial cable, a fiber optic cable or a radio connection.

55. (Previously Presented) The portal of claim 48, wherein said uplink means is configured and adapted for discarding those data packets that are neither associated with a channel that extends across said data interface nor have a destination identifier that matches a destination identifier of said portal.

56. (Previously Presented) The portal of claim 48, comprising:
storage means configured and adapted for storing information indicative of those channels of plurality of channels destinations that extend across said data interface.

57. (Previously Presented) A portal for interfacing a first data bus to a data interface, comprising:

uplink means configured and adapted for receiving first data packets from said data bus and second data packets, each of which second data packets is associated with a respective one of a plurality of channels, determining a destination of each of said first data packets, determining, for each of said second data packets, the channel with which it is respectively associated and transmitting only those of said received first data packets onto said data interface

that are destined for a node of a second data bus that can be reached via said data interface and only those of said received second data packets onto said data interface that are associated with a channel that extends across said data interface.

58. (Previously Presented) The portal of claim 57, wherein said first data packets are not respectively associated with a channel.

59. (Previously Presented) The portal of claim 57, wherein said first data packets are asynchronous data packets.

60. (Previously Presented) The portal of claim 57, wherein said second data packets are isochronous data packets.

61. (Previously Presented) The portal of claim 57, wherein said first data bus is an IEEE 1394 bus.

62. (Previously Presented) The portal of claim 57, wherein said first data bus and said data interface constitute part of a loop-free network..

63. (Previously Presented) The portal of claim 57, wherein said data interface is a bridge.

64. (Previously Presented) The portal of claim 57, wherein said data interface is a wireless bridge.

65. (Previously Presented) The portal of claim 57, wherein said data interface comprises a coaxial cable, a fiber optic cable or a radio connection.

66. (Previously Presented) The portal of claim 57, wherein said uplink means is configured and adapted for discarding those of said first data packets that are neither transmitted onto said data interface nor have a destination identifier that matches a destination identifier of said portal and for discarding those of said second data packets that are neither associated with a channel that extends across said data interface nor have a destination identifier that matches a destination identifier of said portal.

67. (Previously Presented) The portal of claim 57, comprising:
storage means configured and adapted for storing one or more destination identifiers indicative of those destinations that can be reached via said data interface as well as for storing information indicative of those channels of said plurality of channels destinations that extend across said data interface.

68-85. (Canceled)

86. (Previously Presented) A method for interfacing a first data bus to a data interface via a portal, comprising the steps of:

receiving, at said portal, first data packets from said data bus and second data packets from said data bus, each of which second data packets is associated with a respective one of a plurality of channels;

determining a destination of each of said first data packets;

determining, for each of said second data packets, the channel with which it is respectively associated; and

transmitting only those of said received first data packets onto said data interface that are destined for a node of a second data bus that can be reached via said data interface and only those of said second data packets onto said data interface that are associated with a channel that extends across said data interface.

87. (Previously Presented) The method of claim 86, wherein said first data packets are not respectively associated with a channel.

88. (Previously Presented) The method of claim 86, wherein said first data packets are asynchronous data packets.

89. (Previously Presented) The method of claim 86, wherein said second data packets are isochronous data packets.

90. (Previously Presented) The method of claim 86, wherein said first data bus is an IEEE 1394 bus.

91. (Previously Presented) The method of claim 86, wherein said first data bus and said data interface constitute part of a loop-free network.

92. (Previously Presented) The method of claim 86, wherein said data interface is a bridge.

93. (Previously Presented) The method of claim 86, wherein said data interface is a wireless bridge.

94. (Previously Presented) The method of claim 86, wherein said data interface comprises a coaxial cable, a fiber optic cable or a radio connection.

95. (Previously Presented) The method of claim 86, comprising the steps of:
discarding those of said first data packets that are neither transmitted onto said data interface nor have a destination identifier that matches a destination identifier of said portal; and
discarding those of said second data packets that are neither associated with a channel that extends across said data interface nor have a destination identifier that matches a destination identifier of said portal.

96. (Previously Presented) The method of claim 86, comprising the steps of:
storing one or more destination identifiers indicative of those destinations that can be reached via said data interface; and

storing information indicative of those channels of said plurality of channels destinations that extend across said data interface.